

## DE-IDENTIFICATION AND LINKAGE OF DATA RECORDS FOR RE-IDENTIFICATION

### INVENTORS:

Eric S. Gilbert  
Kathi S. Evans  
Troy S. Clark  
Karl Beck

### Abstract of the Disclosure

[00103] Apparatus and method for creating de-identified and linked records is described. More particularly, data records are de-identified at a client computer. De-identification includes field-level encryption. De-identified records may then be sent to a server computer for linkage. Linkage is done using match codes created for such data records at the client computer. The server computer is configured to provide longitudinal linkage of de-identified client records to de-identified master records. In this manner, privacy may be maintained at the client computer prior to transmission of information, and longitudinal linkage of records may occur without exposing personally identifying information. Moreover, method and apparatus for re-identification of longitudinally linked de-identified records is described.